ECS Configuration Change Request

1. Originator Cherry Kenney	2. Log Date: 03/21/02	3. CCR #: 02-0242	4. Rev: —	5. Tel: 301-883-4177	6. Rm #: 3204D	7. Dept. DEV/CO

8. CCR Title: Patch_6A.05_STMGT.01C. For All DAACs. Contains fix for Eight SEV 2 NCRs , Two SEV 3 NCRs and One SEV 5 NCR.

9. Originator Signature/Date Cherry A. Kenney /s/ 3/21/02	10. Class II	11. Type: CCR	12. Need Date: 21Mar02

13. Office Manager Signature/Date Arthur Cohen /s/ 3/21/01	14. Category of Change: Initial ECS Baseline Doc.	15. Priority: (If "Emergency" fill in Block 27). Emergency

16. Documentation/Drawings Impacted:	17. Schedule Impact:	18. CI(s) Affected:STMGT

19. Release Affected by this Change: 6A	20. Date due to Customer: 21Mar02	21. Estimated Cost: None - Under 100K

22. Source Reference: ☒ NCR (attach)   ☐ Action Item ☐ Tech Ref. ☐ GSFC ☐ Other:
33657, 32889, 32267, 33348, 33245, 32652, 32085, 33025, 33255, 33231, 32868

23. Problem: (use additional Sheets if necessary)
Sv=2, ECSed33657,Desc: Ftp Thread Hung in DIRECT Command
Sv=2, ECSed32868, Desc: OPS:6A.04:e0acg11:Anonymous FTP using a browser deletes data
Sv=2, ECSed32889, Desc: GSFC/SMC Distribution hanging in OPS.
Sv=2, ECSed32267, Desc: FTP pull doesn't use configured block size
Sv=5, ECSed33348, Desc: Clean up Firewall code (Additional NCRs on page 3)
Sv=2, ECSed33245, Desc EcDsStPullMonitorServer is out of sync

24. Proposed Solution: (use additional sheets if necessary)
Deliver Patch_6A.05_STMGT.01C . Patch can be installed on top of initial 6A.05 delivery.
NOTICE: THIS PATCH MUST BE INSTALLED AFTER PATCH_6A.05_DSS.01

25. Alternate Solution: (use additional sheets if necessary)
Delay testing; wait until next full system delivery.

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)
Delays in testing or possible delays in 6A.05 operational testing

27. Justification for Emergency (If Block 15 is "Emergency"):
Needed immediately following the delivery of 6A.05.

28. Site(s) Affected: ☐ EDF ☒ PVC ☒ VATC ☒ EDC   ☒ GSFC ☒ LaRC ☒ NSIDC ☐ SMC ☐ AK ☐ JPL
☐ EOC ☐ IDG Test Cell ☐ Other

29. Board Comments:	30. Work Assigned To:	31. CCR Closed Date:

32. EDF/SCDV CCB Chair (Sign/Date): Randall J. Miller /s/ 3/21/02	Disposition: **Approved** App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
33. M&O CCB Chair (Sign/Date): Debra Stepp /s/ 3/21/02	Disposition: **Approved** App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
34. ECS CCB Chair (Sign/Date):	Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS

ADDITIONAL SHEET

CCR #: 02-0242 Rev: **Originator:** Cherry Kenney

Telephone: 301-883-4177   **Office:** 3204D

Title of Change: Patch_6A.05_STMGT.01C. For All DAACs. Contains fix for Eight SEV 2 NCRs, Two SEV 3 NCRs and One SEV 5 NCR.

Actions :

ClearCase

Please make an IRIX65 tar file from the 6A.05 baseline with the
  following footprint:

  .EcDsStArchive.pkg
  .EcDsStDatabase.pkg (Patches 6121, 6123 and 6125)
  .EcDsStIngestFtp.pkg

  The name of this tar file should be Patch_6A.05_STMGT.01C
DAAC INSTALL INSTRUCTIONS

****
                    ** IMPORTANT NOTE **
Patch_6A.05_DSS.01 must be installed BEFORE you install Patch_6A.05_STMGT.01C
****

A. SETUP:

1. Untar the IRIX65 tar file using the following script:
Patch_6A.05_STMGT.01C_Mar13-2002_6A05_irix65_20020313_120007_Setup.ksh
When prompted, do not install a new version of EcsAssist.
2. cd <staging_area>/IRIX65/CUSTOM/dbms/DSS
3. chmod -R 775 *
4. cd <staging_area>/IRIX65/CUSTOM/.installed/DSS/stmgt
5. For Each mode you install: Edit the .rgypatch. Change the following line:
ALL ADD ALL/config/CFG/EcDsStFtpServer/PassiveHosts = /usr/ecs/<MODE>/CUSTOM/data/DSS/EcDsStPassiveFtpHosts
Replace <MODE> with the mode (TS2, TS1 or OPS) you are installing.
6. Suspend all Distributions using the Distribution GUI (using the Suspend All option).
7. Take down all STMGT Servers and the STMGT Gui

B. INSTALLATION:

1. Logon to any SUN in the .sitemap. (E.A.S.I must be run from a SUN)
2. Bring up EcsAssist and via E.A.S.I. install the following three packages:
.EcDsStArchive.pkg
.EcDsStIngestFtp.pkg
.EcDsStDatabase.pkg

C. CONFIGURATION:

The following new parameter will be added to the STMGT .cfgparms file for the EcDsStFtpServer: PassiveHosts
The default value will be /usr/ecs/${MODE}/CUSTOM/data/DSS/EcDsStPassiveFtpHosts
(NOTE: You do not need to change ${MODE} to the MODE. EcsAssist will do this for you if you run Mkcfg.)
Also a file called EcDsStPassiveFtpHosts will be installed in the /usr/ecs/<MODE>/CUSTOM/cfg directory.
The EcDsStFtpServer is installed on the following hosts:

EDC: e0acg11, e0drg011, e0drg012, e0icg11, e0wkg01
    GSFC: g0acg01, g0drg01, g0drg02, g0icg01, g0icg02
    LARC: l0drg01, l0icg01
    NSIDC: n0acg01, n0drg01, n0icg01

On each of these hosts complete steps 1 – 8 (I recommend you configure xxacgnn last)

1. cd /usr/ecs/<MODE>/CUSTOM/cfg

2. mv EcDsStPassiveFtpHosts to /usr/ecs/<MODE>/CUSTOM/data/DSS/EcDsStPassiveFtpHosts
(We installed this in the cfg directory, but then move it to the data/DSS directory. That way the file will not be deleted if we ever
do a delete mode and it will not have to keep editting this file or moving it after installation of STMGT on these hosts.)

3. Bring up EcsAssist Subsystem Manager

4. Drill down through the MODE, DSS, EcDsSt, EcDsStStorgageMgmtApp, and click on EcDsStFtpServer.

5. Next Click on Configuration. Only the configuration parameters for EcDsStFtpServer should be displayed. When the
.cfgparms are displayed verify all values displayed agree with the values already in the Registry. Then click on Continue. A new
EcDsStFtpServer.CFG file will be created.

6. mv EcDsStFtpServer.CFG EcDsStFtpServer.CFG.rgy (You do not need to Populate the Registry, we will update the registry
later using the .rgypatch. Do not try to run a .rgypatch from an SGI.)

STEPS 7 and 8 ARE IMPORTANT ONLY IF YOU HAVE A FIREWALL:

7. ls –lrt SLCsocks5.conf.* (This will display a list of SLCsocks5.conf files)

8. Determine which file has the correct value for your firewall configuration and move that file to SLCsocks5.conf. (Delete the
other copies if desired.)
example: mv SLCsocks5.conf.20020312121212 SLCsocks5.conf
After you have configured the EcDsStFtpServer and moved the SLCsocks5.conf and EcDsStPassiveFtpHosts files on all listed
hosts, do the following on the host where the EcDsStFtpServer with a hardware CI of NONE is installed (normally xxacgnn):

9. cd /usr/ecs/<MODE>/CUSTOM/data/DSS

10. Edit the EcDsStPassiveFtpHost file. add fully qualified hosts names to the file. The hosts name to be added will be the
external hosts for which you wish to use passive FTP for FTPing files
.
(Byron Peters should be contacted at 301-883-4077 to get a list of the hosts names for your DAAC.) If you nave no host names
to add, then the file should will be 0 length, but should still exist.)

Next we will update the Registry for EcDsStFtpServer – We must do this on a sun.

11. Log on to the host where EcDsStmgtGui (or EcDsStRequestManager) is installed

12. cd /usr/ecs/<MODE>/CUSTOM/.installed/DSS/stmgt

13. cp <staging_area>/IRIX65/CUSTOM/.installed/DSS/stmgt/.rgypatch .rgypatch

14. Bring up the EcsAssist Subsystem Manager

15. Choose the MODE, DSS and EcDsSt.

16. On the Tools Menu, Click on Registry Data Patch

17. Fill in the following:
Registry Database Server: xxicgnn
Registry DBO Id: css_role
Registry Password: <password>
Registry DB Name: EcCsRegistry<_MODE> (Remember to enter carriage return
Tree to patch: (select from pull down menu)

Patch File: -- /usr/ecs/<MODE>/CUSTOM/.installed/DSS/stmgt/.rgypatch

18. To view the contents of the patch file you are about to apply click on the words Patch File.

19. After you have reviewed the .rgypatch file, click OK. This will update the current Registry tree with the new PassiveHosts parameter for EcDsStFtpServer for all hosts.

D. PATCH STMGT DATABASE:
1. On the host were the STMGT database is installed (xxacgnn), bring up EcsAssist Subsystem Manager
2. Select the MODE, DSS, EcDsSt and then click on Database Patch
3. Update the STMGT database with the following patches:
Patch Number   Patch Description

6121   Modified DsStCMSelectExpiredLinks store procedure to allow deletion of file links.
6123   Adds new store procedure DsStCMUpdateExpireDir, sets new Expiration datetime for the file transfered.
6125   Changes Retention default in DsStStagingDisk to 720 and updates the Retention values in table by changing value to 720 (NCR 33025)
6129   Changes DsStCMDeleteExpiredLiens.sp to free space reserved by client (NCR 33245)

IMPORTANT: Patch 6120 must be installed by Patch_6A.05_DSS.01 prior to this.
(Since the delivery of 6A.05 Patches 6120, 6121, 6123, 6125 and 6129 are the only patches that have been added to the STMGT database.)

POST INSTALLATION

While testing the NCRs for this delivery it was discovered the original 6A.05 Installation Instructions contain an error. To correct this error you need to do the following 3 steps:
1. Bring up the STMGT Gu

2.   Select EcDsStCacheManagerServerPULL, Click On Modify Server (This only applies to the Pull Monitor)

3. Revew the value for the FTP Notification file. You may have a directory and file name listed in this field. This field should only contain the DIRECTORY name where the FTP Notificaton File resides. DO NOT ADD THE FILE NAME. If this value is not correct please update it an then click on OK.

4. Warm Start all the STMGT servers. You may also bring up the STMGT GUI if needed.

5. Manually Resume all distribution on the DDIST GUI and click on Resume ALL.

Additional NCRs from page 1

Sv=2, Bug id = ECSed32652, Desc: OPS:6A.04:EcDsStPullMonitorServer cored due to Segmentation
Sv=2, Bug id = ECSed32085, Desc: STMGT Db Patch logging incomplete
Sv=2, Bug id = ECSed33025, Desc: OPS:6A.04:DDIST: XLargeRequest MULTIPLE Failed w/DiskNot
Sv=3, Bug id = ECSed33255, Desc: Ensure STMGT tables have datapages locking scheme as appropriate
Sv=3, Bug id = ECSed33231, Desc: Storage Management database patch EcDsStDbPatch6121.sql references 6119, A

See attached Test Report.

System Ingration and Test PATCH TEST PLAN

System Integration and Test PATCH TEST PLAN		
Path Name/ID: Patch_6A.05_STMGT_01C	**Delivery Date:11 Mar.02** **Install Location/Mode:** **PVC/TS2**	**Assigned Engineer:** Lillian Washington
Included NCRs: **ECSed32868** - OPS:6A.04:e0acg11:Anonymous ftp using a browser deletes data **ECSed32889** -GSFC/SMC Distribution hanging in OPS **ECSed32267**-FTP pull doesn't use configured block size **ECSed33348**-Clean up firewall code **ECSed33245-** OPS:6A.04.C3:SA:EcDsStPullMonitorServer is out of sync with the database **ECSed32652-**OPS:6A.04:EcDsStPullMonitorServer cored due to Segmentation **ECSed32085**-STMGT Db Patch logging incomplete **ECSed33025**-OPS:6A.04:DDIST:XlargeRequest MULTIPLE Failed w/DiskNotExit **ECSed33255**-Ensure STMGT tables have data pages locking schema as appropriate **ECSed33231**-Storage Management database patch EcDsStDbPath6121.sql references **ECSed33657**-Ftp Thread Hung in DIRECT Command	**Footprint:** (size and type of patch: affected systems/capabilities.etc) This patch is a STMGT patch, affected capabilities are:FTP pull(s), Anonymous ftp(s), PullMonitorServer, DDIST, STMGT DB	
Ops Objective (s): Verification of NCRs via Functional testing and Regression testing to insure stmgt is function properly.		
Requirements: Modes/Tools: TS2 and OPS mode, sds test driver,		
Requirements: L7, Aster, MOD000, AIRB0SCI		
Requirements: Point(s) of Contact: Tzhu Hzhang Hclglaz Dhall Oladele Rhartran	**Requiremets: Personnel Needed to Execute Tests:** JRattiga Mricucci	
Estimated Time to Complete: (Including Preparation Time) **DAYS**: 6 **HRS:**		
Inputs/Actions:	**Outputs/Expected Results:**	**Comments:**

ECSed32868 - OPS:6A.04:e0acg11:Anonymous ftp using a browser deletes data: **1.** Anonymous Ftp small L7 file to completion. 2. Check PullMonitorDebug.log to make sure the "Target file size" and "our size" are equal. 3. Anonymous Ftp a Large L7 file, kill before completion. 4. Check PullMonitorDebug.log "Target file size" and "our size" should not match. Log message should read "Link is not removed, since the file has not been transferred completed"	Anonymous Ftp small file complete. PullMonitorDebug.log show target file size and our size match. Anonymous ftp killed during transfer. PullMonitorDebug.log show target file size and our size not matching. Log also indicated link as not been deleted since file was not transfer completed.	On the Stmgt. Gui. The Cache ManagerServer Configuration "FTP Notification File" should not include "PullFtpNotify.dat" at the end of the path - remove it if it is included.
ECSed32889 -GSFC/SMC Distribution hanging in OPS • A Gsfc 24hr run was conducted on 3/12/02 in the PVC OPS mode using 6A.06_PRELIM.08 code- the Distribution hang problem was not seen. Later the cache and Pull area were check and it was clean Developer ran test in PVC lab TS2 • Brought down FtpServer • Sent in 2 ftp Push requests using SDS Test Driver • Check table to see if links were created in the DsStFileLink table • Expired Links in DsStFileLink Table • Updated DsStCacheTable. Set the totalCacheSpace to sum of files currently in Cache. • Sent in a new FtpPush request • Verified that Links were cleared from table	Regression tested in the PVC 24 hr run. Also ran in the PVC lab successfully.	
ECSed32267-FTP pull doesn't use configured block size • Developer was checking performance of ftp server.	This NCR was regression tested by the developer in the PVC, TS2.	
ECSed33348-Clean up firewall code • Modify ftp passive host file • Submit ftp push request • Verify ftpServerDebug.log indicate passive ftp was used	FtpServerDebug.log showed passive ftp being used.	
ECSed33245- OPS:6A.04.C3:SA:EcDsStPullMonitorServer is out of sync with the database	Developer recommend this NCR be verify at the site. Unable to verify on site.	

ECSed32652- OPS:6A.04:EcDsStPullMonitorServer cored due to Segmentation • Push data to directory 100% full • ftp push acquire large file using wrong Password • ftp push acquire large file using wrong directory • check ftpDebug.log	The ftp Debug.log showed "Not logged in - error in ftp #530 - username or password incorrect" all acquires failed. System did not core.
ECSed32085-STMGT Db Patch logging incomplete • EcDsStDbPatch was modified in the database to send the output the debug_logfile	Regression tested in the EDF lab. Errors are now seen in the patch log file
ECSed33025-OPS:6A.04:DDIST:XlargeRequest MULTIPLE Failed w/DiskNotExit • Developer changed database for the retention field defaults to 48 hours	Regression tested in the EDF lab.
ECSed33255-Ensure STMGT tables have data pages locking schema as appropriate • Developer added lock datapages to the EcDsStDbTable.sql file in the database	This NCR has a closed status.
ECSed33231-Storage Management database patch EcDsStDbPath6121.sql references • Developer put a fix in the 6121.sql file and deleted the reference to 6119	This NCR has a closed status.
ECSed33657-Ftp Thread Hung in DIRECT Command • A Gsfc 24 hr run was conducted on 3/12/02 in the PVC OPS mode using the 6A.06_PRELIM.08 code. There were no ftp threads observed that hung with a similar DIRECT Command unsuccessful message.	No Ftp Thread Hung in DIRECT Command during the Gsfc 24 hr run.
Attachments (Meassages/snaps):	